State Revolving Fund Loan Programs
Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT

TOWN OF NEWBURGH
2015 SANITARY SEWER IMPROVEMENTS PROJECT

STATE REVOLVING FUND PROJECT # WW 15 06 87 06

DATE: January 14, 2016

TARGET PROJECT APPROVAL DATE: February 11, 2016

I. INTRODUCTION

The above entity has applied to the State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the wastewater project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed in color at http://www.in.gov/ifa/srf/.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the target project approval date. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

April Douglas
Senior Environmental Manager
State Revolving Fund – IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-234-7294
adouglas@ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address:	**2015 Sanitary Sewer Improvements Project** Town of Newburgh 23 West Jennings Street, P.O. Box 100 Newburgh, IN 47629
SRF Project Number:	WW 15 06 87 06
Authorized Representative:	William Kavanugh, Town Council President

II. PROJECT LOCATION

The proposed projects are located in Warrick County, Boon and Ohio Civil Townships, Newburgh USGS Quadrangle map, Township 6S, Range 9W and sections 22, 26, 27, 28, and 29. See Figure 1 for an aerial map of the project location.

III. PROJECT NEED AND PURPOSE

Newburgh has been very proactive in planning improvements to their sanitary sewer collection system by addressing both existing and future needs.

These improvements include the following projects:

A. Deaconess Lift Station (L.S.) and Force Main (F.M.) Project:

The Deaconess L.S. currently accepts flows from the Deaconess service area and flows from the Colonial Hills L.S. The Deaconess service area has been experiencing rapid growth with the construction and expansion of the Deaconess Hospital Complex, associated businesses, and numerous residential subdivisions. Additional growth is anticipated as more health related businesses are created. In addition, a new Christian High School is planned just east of the existing lift station.

The proposed project includes: the installation of a new lift station with a 10-inch force main that will discharge into a new 12-inch gravity sewer; the 12-inch gravity sewer will then connect to a new 15-inch gravity sewer; and the new 15-inch gravity sewer will then connect to a new18-inch gravity sewer being proposed for the Halston Gravity sewer project. The Colonial Hills L.S. will now be connected to the existing Deaconess 8-inch force main, which will bypass the new Deaconess L.S. and discharge into an existing 18-inch gravity sewer. This project also involves the replacement of an existing manhole on the south side of Lincoln Avenue that experiences significant infiltration and inflow (I&I).

B. Kingston Lift Station Elimination Project:

The Kingston service area has been experiencing significant I&I particularly during wet weather conditions as well as experiencing growth causing the lift station to exceed its design capacity. This lift station is also deteriorating and needs to be either replaced or eliminated.

The proposed project includes eliminating the existing lift station and replacing it with new gravity sewers that will connect to the Triple Crown L.S.

C. Halston Force Main Replacement Project:

The existing Halston L.S. force main is deteriorating and has reached the end of its useful life. The pipe has failed several times due to its inability to handle high flows during heavy rain events. The lift station wet well is experiencing minor concrete deterioration and the valves in the valve vault have reached the end of their useful life.

The proposed project involves the installation of a new 8-inch force main that will connect to an existing 12-inch gravity sewer at Pine Valley Estate Subdivision, which will eventually flows to the proposed 18-inch Halston gravity sewer that will ultimately convey flows to the Master Lift Station (MLS). Although the existing force main is deteriorating, it will remain in service and serve only as a bypass when the new force main requires maintenance. The lift station will be rehabilitated as well as making improvements to the lift station site.

D. Halston Gravity Sewer Main Extension Project:

The Halston Gravity sewer main extension is necessary in providing enough capacity to handle the redirected flows from the new Halston force main; the redirected flows from the new Deaconess force main; and flows for future development. All flows from the Halston Gravity sewer project will be transported north to the MLS. The redirection of these flows will also alleviate flows to the Triple Crown L.S., which will help extend its useful service life and save energy.

The proposed project includes the extension of a new 18-inch gravity sewer from an existing 12-inch gravity sewer (currently serving the Pine Valley Estate Subdivision) which will ultimately transport flows north to the MLS via an existing 18-inch gravity sewer.

E. Lincoln Avenue Widening, Phase III Sanitary Sewer Relocation Project:

Phase III is the final phase of the Indiana Department of Transportation's (INDOT) road reconstruction project that will widen Lincoln Avenue from the Bell Road intersection to Lenn Road. This INDOT project involves relocating portions of the sanitary sewer in advance of the road reconstruction project scheduled for the fall of 2016.

The proposed project entails relocating the gravity sewers and manholes at the Bell Road; Elm Drive; Pine Drive; SR 261; Maryjoetta Drive; and Meadowbrook Lane intersections to avoid construction conflicts.

IV. PROJECT DESCRIPTION

The proposed 2015 sanitary sewer improvements include the following projects:

A. Deaconess Lift Station and Force Main Rehabilitation project includes (see Figure 2):

1. Constructing a new lift station consisting of two pumps with a capacity between 500 and 1,000 gallons per minute (gpm) each and controlled by variable frequency drives;
2. Installing a standby generator with an automatic transfer switch;
3. Installing approximately 4,200 feet of 10-inch polyvinyl chloride (PVC) or Ductile Iron (DI) force main;
4. Installing approximately 930 feet of 12-inch gravity sewer;
5. Installing approximately 1,396 feet of 15-inch gravity sewer;
6. Installing approximately ten manholes;
7. Converting existing wet well to manhole;
8. Installing flow metering structure;
9. Making piping improvements to the Colonial Hills L.S. F.M. to connect to the existing 8-inch Deaconess L.S.;
10. Abandoning the Deaconess L.S.; and
11. Replacing Manhole #03-52B.

B. Kingston Lift Station Elimination project includes (see Figure 3):

1. Abandoning the existing lift station;
2. Installing approximately 63 feet of 12-inch PVC gravity sewer;
3. Installing approximately 1,725 feet of 15-inch PVC gravity sewer;
4. Installing approximately 1,625 feet of 16-inch PVC gravity sewer;
5. Installing approximately 200 feet of 24-inch PVC gravity sewer;
6. Installing approximately 19 manholes; and
7. Installing flow meter structure.

C. Halston Force Main Replacement project includes (see Figure 4):

1. Installing approximately 3,825 feet of 8-inch PVC or DI force main;
2. Installing approximately75 feet of 6-inch PVC force main;
3. Installing approximately two combination air valves;
4. Lining lift station wet well;
5. Replacing pipes and valves in valve vault, and bypass pump connections;

6. Constructing concrete structure for chemical container to be used for odor control;

7. Installing flow meter structure; and

8. Reconstructing the access drive.

D. Halston Gravity Sewer Main Extension project includes (see Figure 6):

1. Installing approximately 1,095 feet of 18-inch PVC gravity sewer;

2. Installing approximately 45 feet of 12-inch PVC gravity sewer;

3. Installing approximately 22 ft of 15-inch PVC gravity sewer;

4. Installing approximately five new manholes; and

5. Raising five existing manholes to grade.

E. Lincoln Ave. Widening, Phase III Sanitary Sewer Relocation project includes (see Figure 5):

1. Installing approximately 1,800 feet of 8-inch PVC gravity sewer;

2. Installing approximately 143 feet of 6-inch PVC sewer laterals;

3. Installing 19 manholes;

4. Grouting abandoned sewers; and

5. Resurfacing the road.

V. Estimated Project Costs, Affordability and Funding

A. Selected Plan Estimated Cost Summary

Deaconess Lift Station and Force Main Rehabilitation Project

Construction Costs	
Construction and Equipment	$1,685,000
10% Contingency	168,500
Total Construction Cost	**$1,853,500**
Non-Construction Costs	
Administrative, Legal, Bond Counsel, Rate Consultant	
American Iron and Steel, and Labor Standards	$ 87,200
Land & Easement Acquisition *	6,900
Archaeological	3,500
Engineering Fees	
Geotechnical Investigation	10,000
Design	126,950
Construction	25,200
Post Construction	2,200
Easement Preparation	14,380
Permit Assistance	2,600

Erosion Control Plan		3,500
Record Drawings		4,200
Project Inspection		138,200
	Total Non-Construction Cost	**$ 424,830**
Total Estimated Project Cost		**$2,278,330**

* SRF Ineligible

Kingston Lift Station Elimination Project

Construction Costs		
Construction and Equipment		$1,082,220
10% Contingency		108,222
	Total Construction Cost	**$ 1,190,442**
Non-Construction Costs		
Administrative, Legal, Bond Counsel, Rate Consultant		
American Iron and Steel, and Labor Standards		$ 87,200
Land & Easement Acquisition *		20,000
Archaeological		2,000
Engineering Fees		
Design		86,887
Construction		15,300
Post Construction		1,600
Easement Preparation		4,900
Permit Assistance		11,390
Erosion Control Plan		3,956
Record Drawings		1,667
Project Inspection		109,300
	Total Non-Construction Cost	**$ 344,200**
Total Estimated Project Cost		**$1,534,642**

Halston Force Main Replacement Project

Construction Costs		
Construction and Equipment		$ 432,000
10% Contingency		43,200
	Total Construction Cost	**$ 475,200**
Non-Construction Costs		
Administrative, Legal, Bond Counsel, Rate Consultant		
American Iron and Steel, and Labor Standards		$ 87,200
Land & Easement Acquisition *		15,000
Archaeological		2,000
Engineering Fees		
Design		63,000
Construction		12,000
Post Construction		1,800
Geotechnical Investigation		7,500
Easement Preparation		18,000
Permit Assistance		6,066
Erosion Control Plan		3,288

Record Drawings		2,746
Project Inspection		68,700
	Total Non-Construction Cost	**$ 287,300**
Total Estimated Project Cost		**$ 762,500**

Halston Gravity Sewer Main Project

Construction Costs		
Construction and Equipment		$ 296,585
10% Contingency		29,659
	Total Construction Cost	**$ 326,244**
Non-Construction Costs		
Administrative, Legal, Bond Counsel, Rate Consultant		
American Iron and Steel, and Labor Standards		$ 87,200
Land & Easement Acquisition *		7,500
Archaeological		2,000
Engineering Fees		
Study and Report		13,100
Design		42,900
Construction		12,000
Post Construction		1,800
Geotechnical Investigation		6,800
Easement Preparation		3,000
Permit Assistance		9,500
Record Drawings		2,000
Project Inspection		45,000
	Total Non-Construction Cost	**$ 232,800**
Total Estimated Project Cost		**$ 559,044**

Lincoln Avenue Widening Phase III - Sanitary Sewer Relocation Project

Construction Costs		
Construction and Equipment		$ 661,440
10% Contingency		66,144
	Total Construction Cost	**$ 727,584**
Non-Construction Costs		
Administrative, Legal, Bond Counsel, Rate Consultant		
American Iron and Steel, and Labor Standards		$ 87,200
Land & Easement Acquisition *		10,000
Archaeological		2,000
Engineering Fees		
Study and Report		13,500
Design		70,400
Construction		24,100
Post Construction		1,900
Easement Preparation		22,000
Permit Assistance		11,200
Erosion Control Plan		3,300
Record Drawings		2,500

Project Inspection	99,800
Total Non-Construction Cost	**$ 347,900**
Total Estimated Project Cost	**$1,075,484**
Preliminary Engineering Report	**75,000**
Total Project Cost	**$ 6,285,000**
Ineligible costs	59,400
Total SRF Loan amount	**$ 6,225,600**

B. Newburgh will borrow approximately $6,225,600 from the State Revolving Fund Loan Program with a 20-year loan at an interest rate to be determined at loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

A. Three alternatives were evaluated for the Deaconess Lift Station and Force Main Rehabilitation project including the "No Action" alternative.

1. "No Action" alternative: This alternative was rejected since the existing lift station is 27 years old and will continue to deteriorate as well as have insufficient capacity to handle future flows.

2. Expand the Deaconess Lift Station: This alternative consists of installing a new lift station, force main and gravity sewer to handle the combined flows from the Deaconess and Colonial Hills service areas.

3. Separate the Deaconess and Colonial Hills Lift Stations: This alternative consists of installing a new lift station, force main and gravity sewer to handle flows from the Deaconess service area. The Colonial Hills L.S. flows will be separated and pumped directly to an existing 15-inch gravity sewer through the existing Deaconess 8-inch force main. **Based on cost this was the selected alternative**.

B. Four alternatives were evaluated for the Kingston Lift Station Elimination project including the "No Action" alternative.

1. "No Action" alternative: This alternative was rejected since the existing lift station structure will continue to deteriorate and has inadequate capacity to handle wet weather flows.

2. Increase Lift Station Capacity: This alternative consists of rehabilitating the lift station with new pumps that will increase the capacity from 320 gallons per minute (gpm) to 597 gpm.

3. New Force Main to Manhole 12-136: This alternative consists of installing a new force main which will discharge to Manhole 12-136 and eventually discharge to the MLS.

4. New Gravity Sewer: This alternative consists of installing a new gravity sewers to discharge to the Triple Crown L. S. **Based on cost this was the selected alternative**.

C. Three alternatives were evaluated for the Halston Force Main Replacement project including the "No Action" alternative.

1. "No Action" alternative: This alternative was rejected since the existing force main will continue to deteriorate and eventually fail causing sewage spills.

2. Install New 6-Inch Force Main to Existing Discharge Manhole: This alternative consists of constructing a new force main that will discharge to the existing Manhole 11-271. The flows will eventually discharge to the Triple Crown L.S., which pumps to the MLS.

3. Install a New 8-Inch Force Main to a New Discharge Manhole: This alternative consists of constructing a new force main that will discharge to a new manhole at the existing 12-inch gravity sewer serving the Pine Valley Estate Subdivision. The flows will eventually discharge by gravity to the MLS. **Based on cost this was the selected alternative.**

D. Two alternatives were evaluated for the Halston Gravity Sewer Main Extension project including the "No Action" alternative.

1. "No Action" alternative: This alternative was rejected since there would be a missing conveyance conduit between the Halston Force Main discharge point and the existing 18-inch trunk line sewer located on the south side of S.R. 66.

2. Extending a New 18-Inch Trunkline: This alternative consists of installing a new 18-inch trunkline from an existing 12-inch sewer in the Pine Valley Estate Subdivision to an existing 18-inch gravity sewer south of S.R. 66. This will also include a 15-inch gravity sewer stub for the Deaconess L.S. project. **Based on cost this was the selected alternative.**

VII. Environmental Impacts of the Feasible Alternatives

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: While paralleling the road, the force main and sewer lines will be within areas disturbed by road construction and previous development. Force mains and gravity sewers through farm fields are anticipated to affect previously disturbed land. Pipes will generally be installed by open cut methods where possible. Road and ditch crossings will be directionally drilled where possible for force mains to minimize traffic disruptions and environmental impacts.

Structural Resources: Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "*no historic properties affected.*"

Surface Waters: All stream crossings will be constructed by jack and bore to minimize impacts on the stream.

Surface waters near the project area include Howard Ditch, Edwards Ditch, Willow Pond Ditch, Sprengle Ditch, small unnamed tributaries, and several small drainage retention ponds. The project will not adversely affect outstanding state resource waters listed in 327 IAC 2-1.3-3(d), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational

Rivers and Streams listed in 312 IAC 7-(2), or Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3) or streams on the Outstanding River List for Indiana.

Wetlands (Figures 2 through 6): The Deaconess lift station force main passes through an area indicated as a Historic Wetland, which was likely destroyed by development of the residential subdivision along Schnapf Lane and construction of the St. Luke Lutheran Church.

Howard Ditch, Edwards Ditch, Willow Pond Ditch, Sprengle Ditch, and small unnamed tributaries to these waterways are identified as wetland lines, and will need to be crossed during construction. Ditch crossings will be directionally drilled where possible for force mains to minimize environmental impacts.

Mitigation measures to lessen and compensate for wetland impacts cited in comment letters regarding the project from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

Floodplain (Figures 2 through 6): Raising land surface is not anticipated because most of the project has underground facilities. Protection will be provided for new above-ground structures within the floodplain as required by the IDNR Division of Water.

Groundwater: Sections of the project may be affected by high groundwater. If dewatering is required to complete construction, dewatering flows will be discharged to a settling basin prior to being discharged to surface water. The amount of dewatering is anticipated to be minimal. Therefore, dewatering is not expected to cause long-term detriment to the groundwater table of local wells. The project will not impact sole source aquifers.

Plants and Animals: The Halston FM Project will be constructed within a wooded area south of Lincoln Avenue, adjacent to the road right-of-way (ROW) within a new easement. The force main in this location will be directionally drilled (trenchless) to avoid disturbance to the wooded area.

The Lincoln Avenue Widening Project will be constructed within a wooded area south of Lincoln Avenue, just west of Lenn Road, adjacent to the road ROW within a new easement. Tree clearing will be required for installation in the new easement. Additionally, minimal tree clearing will be required for a crossing near Meadowbrook. The tree clearing will be within an existing public utility easement.

For the Deaconess Lift Station project, east of Epworth Road, the Deaconess force main will be constructed along and north of a line of trees and brush along the north property line of a residential subdivision. The eastern portion of the Deaconess force main and the western portion of the Deaconess gravity sewer, approximately 800 feet, will be constructed within a wooded area in a new easement. Approximately 0.4 acre of the wooded area will be cleared for construction of the Deaconess force main and gravity sewer.

A portion of the Kingston project will be constructed through an area of scrub/shrub immediately west of the Kingston Lift Station.

The construction of these projects will be implemented to minimize impact to non-endangered species and their habitats. Mitigation measures cited in comment letters from the Indiana DNR and the US Fish and Wildlife Service will be implemented.

Prime Farmland: The project will permanently convert an acre of prime farmland, and temporarily impact 0.725 acres of prime farmland.

Air Quality: Construction activities may generate some noise, fumes and dust, but should not significantly affect air quality.

Open Space and Recreational Opportunities: The project will neither create nor destroy open space or recreational opportunities.

Lake Michigan Coastal Program: The project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks: Construction and operation of the proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The town's Preliminary Engineering Report (PER) states: *The Town of Newburgh, through the authority of its council, planning commission, or other means will ensure future development, as well as future collection system or treatment works projects connecting to SRF-funded facilities, will not adversely affect wetlands, wooded areas, steep slopes, archaeological/historical/structural resources or other sensitive environmental resources. The Town will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

In correspondence dated December 15, 2015, the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology stated:

Pursuant to IC 13-18-21 and 327IAC 14 and Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") is conducting an analysis of the materials dated and received by the Indiana SHPO on December 7, 2015, for the above indicated project in Boon and Ohio Townships, Warrick County, Indiana.

Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project.

Thank you for the submission of the archaeological reconnaissance report by Plunkett (11/30/2015). We concur with the results of the archaeological survey. Archaeological sites 12-W-0095, 12-W-0096, and 12-W-0773 do not appear to be eligible for listing in the National Register of Historic Places. Site forms updating the information for 12-W-0095 and 12-W-0096 should be entered into the SHAARD database, as well as a site form for the newly recorded site, 12-W-0773.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 & 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 80.

In correspondence dated September 21, 2015, the United States Fish and Wildlife Service stated:

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.

The proposed project consists of replacement of an existing lift station and force main, installation of new gravity sewer and force main, and relocation of existing sanitary sewer. It appears most work will be done on previously disturbed land or within the limits of road right-of-ways.

We do not anticipate significant impacts on fish and wildlife resources from this project, but we recommend the following mitigation measures to minimize impacts.

1. Avoid or minimize removal of mature native hardwood trees within the construction corridor.

2. Implement temporary erosion and siltation control devices as necessary.

3. Use directional drilling at all stream crossings to avoid stream and riparian impacts.

4. If directional drilling is not feasible, construct the stream crossings during a low flow period and use best management practices to prevent erosion and soil runoff to the streams.

5. Establish vegetated buffer strips along stream banks after work is completed. Buffer strip widths should be at least 10 feet and preferably 25 feet.

6. Revegetate all disturbed soil areas with native plant species suitable for riparian areas immediately upon project completion. We recommend seed mixes that include species of nectar-producing plants and milkweed endemic to the area where the mix is applied.

7. Avoid disturbance within the stream channel during the fish spawning season (April 1-June 30).

Wetland and stream impacts may require permits from the US Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with the Corps of Engineers mitigation guidelines.

Endangered Species

Warrick County is within the range of the federally endangered Indiana bat (Myotis sodalis) and sheepnose mussel (Plethobasus cyphyus) and the federally threatened northern long-eared (Myotis septentrionalis). The sheepnose mussel range is limited to the Ohio River which will not be impacted by the project, therefore we concur that the proposed project is not likely to adversely affect this listed species.

Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

During the summer, NLEBs typically roost singly or in colonies in cavities, underneath bark, crevices, or hollows of both live and dead trees and/or snags (typically ≥ 3 inches dbh). Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on presence of cavities or crevices or presence of peeling bark. It has also been occasionally found roosting in structures like barns and sheds (particularly when suitable tree roosts are unavailable). They forage for insects in upland and lowland woodlots and tree lined corridors. During the winter, NLEBs predominantly hibernate in caves and abandoned mine portals. Additional habitat types may be identified as new information is obtained.

There is suitable summer habitat for the Indiana bat and northern long-eared bat present throughout the area surrounding the project site. There are no current records of Indiana bats near the site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect these species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing be avoided during the period April 1 – September 30. If this measure is implemented we concur that the proposed project is not likely to adversely affect these listed species.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If project plans are changed significantly, please contact our office for further consultation.

In correspondence dated October 8, 2015 the Department of Natural Resources Environmental Unit stated:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 lAC 10-5 that applies to utility line crossings. Please include a copy of this letter with the permit application if the project doesn't meet the general license criteria.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments:

1) Stream Crossings: We recommend that all creek or stream crossings be done using a trenchless method. When crossing a stream with a forested buffer, the boring should extend to the outer edges of the forested area along the stream to minimize impacts to forested riparian habitat. If the open-trench method is necessary and the only feasible option at any of the planned stream crossings due to the site conditions, then the following measures should be implemented:

a) Any open trench stream crossing should be timed to coincide with the low-water time of year (typically mid- to late-summer).

b) Restore disturbed streambanks using bioengineering bank stabilization methods and revegetate disturbed banks with native trees, shrubs and herbaceous plants. Stream bank slopes after project completion should be restored to stable-slope steepness (not steeper than 2:1).

c) The cleared width through any forested area should be the minimum needed to install the line and no more than 20 feet wide through the forested area to allow the canopy to close over the line.

d) Use graded stone or riprap to protect the section of trench below the normal water level from scour or erosion (any stone or riprap fill in the streambed must not be placed above the existing streambed elevation to avoid creating a fish passage obstruction).

Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

2) Riparian Habitat: We recommend a mitigation plan be developed (and submitted with the permit application, if required) if habitat impacts will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: http://www.in.gov/leg islative/iac/20120801-IR-312120434NRA.xml.pdf.

Impacts to non-wetland forest over one (1) acre or more should be mitigated at a minimum 2:1 ratio. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees). Impacts to wetlands should be mitigated at the appropriate ratio as well.

The mitigation site for impacts in the floodway should be located in the floodway, downstream of the one (1) square mile drainage area of that stream (or another stream within the 8-digit HUC, preferably as close to the impact site as possible) and adjacent to the existing forested riparian habitat.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas with a mixture of native grasses, sedges wildflowers, and native shrub and hardwood tree species as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants (e.g. crown-vetch).

2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

3. Do not work in the waterway from April1 through June 30 without the prior written approval of the Division of Fish and Wildlife.

4. Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.

5. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.

6. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.

7. Post "Do Not Mow or Spray" signs along the right-of-way.

8. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

9. Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

In correspondence dated August 25, 2015 the Natural Resources Conservation Service stated:

The proposed project will cause a conversion of prime farmland.

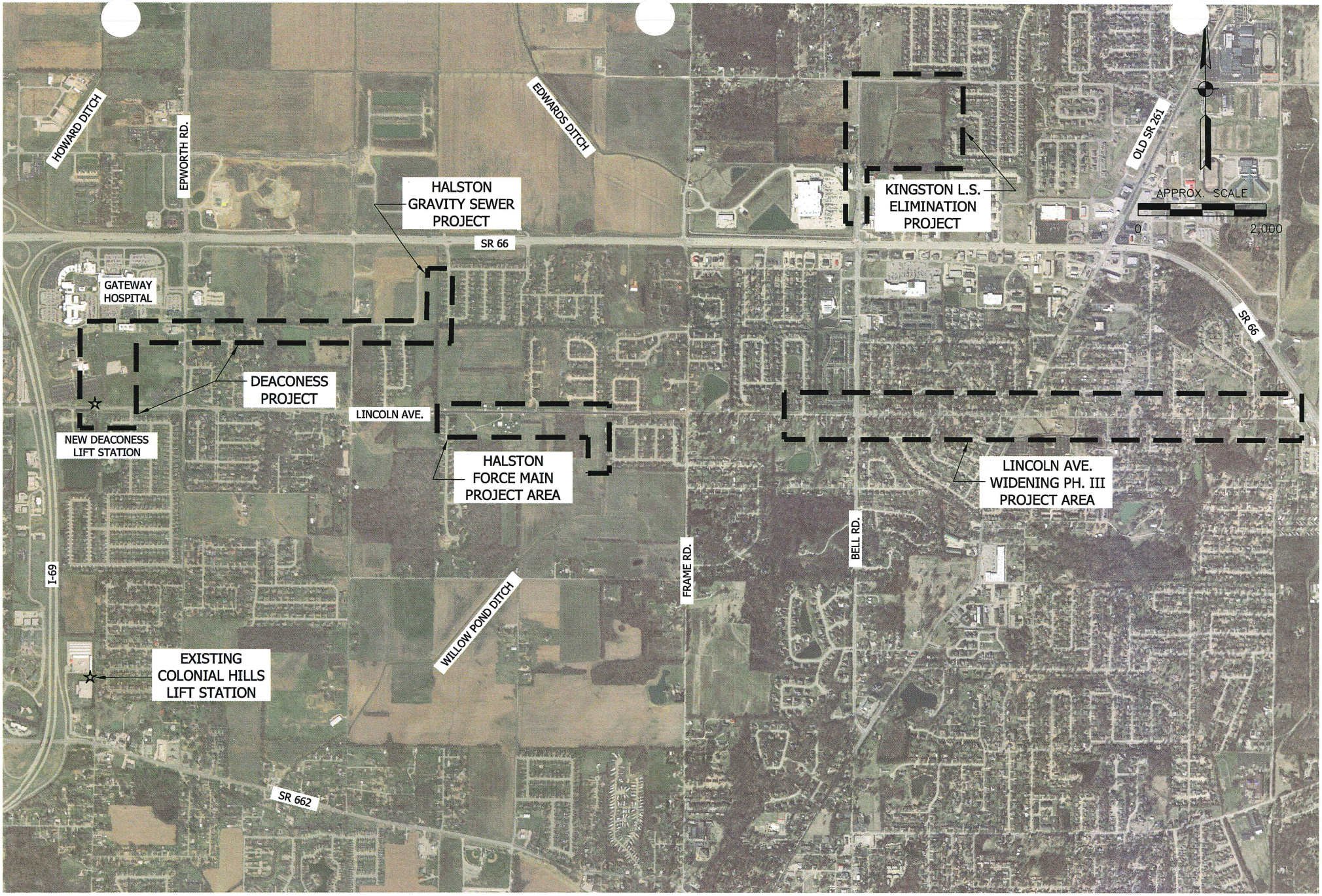
VIII. Mitigation Measures

Newburgh's PER states:

The majority of the environmental impacts will occur during construction of the proposed improvements. These issues are temporary in nature, since no significant impacts to environmental historical, or other regulated resources are involved. Temporary construction impacts include the potential for noise, dust, and construction site erosion. Provisions will be included in the construction plans and specifications to limit such problems and to provide erosion control in accordance with current state standards. The work is expected to be completed during normal working hours, restricting any work related nuisances to those hours. All construction equipment will be required to have mufflers to reduce noise pollution. Additionally, reasonable and proper construction techniques and clean up practices will be required by the contractor to reduce dust emissions. Proper surface wetting practices will be required. Erosion control measures including seeding, drainage inlet protection, and silt fencing will also be utilized.

IX. Public Participation

A properly noticed public hearing was held on October 14, 2015 at 5:30 pm at the Town Hall to discuss the PER. No written comments were received during the 5-day comment period following the hearing.



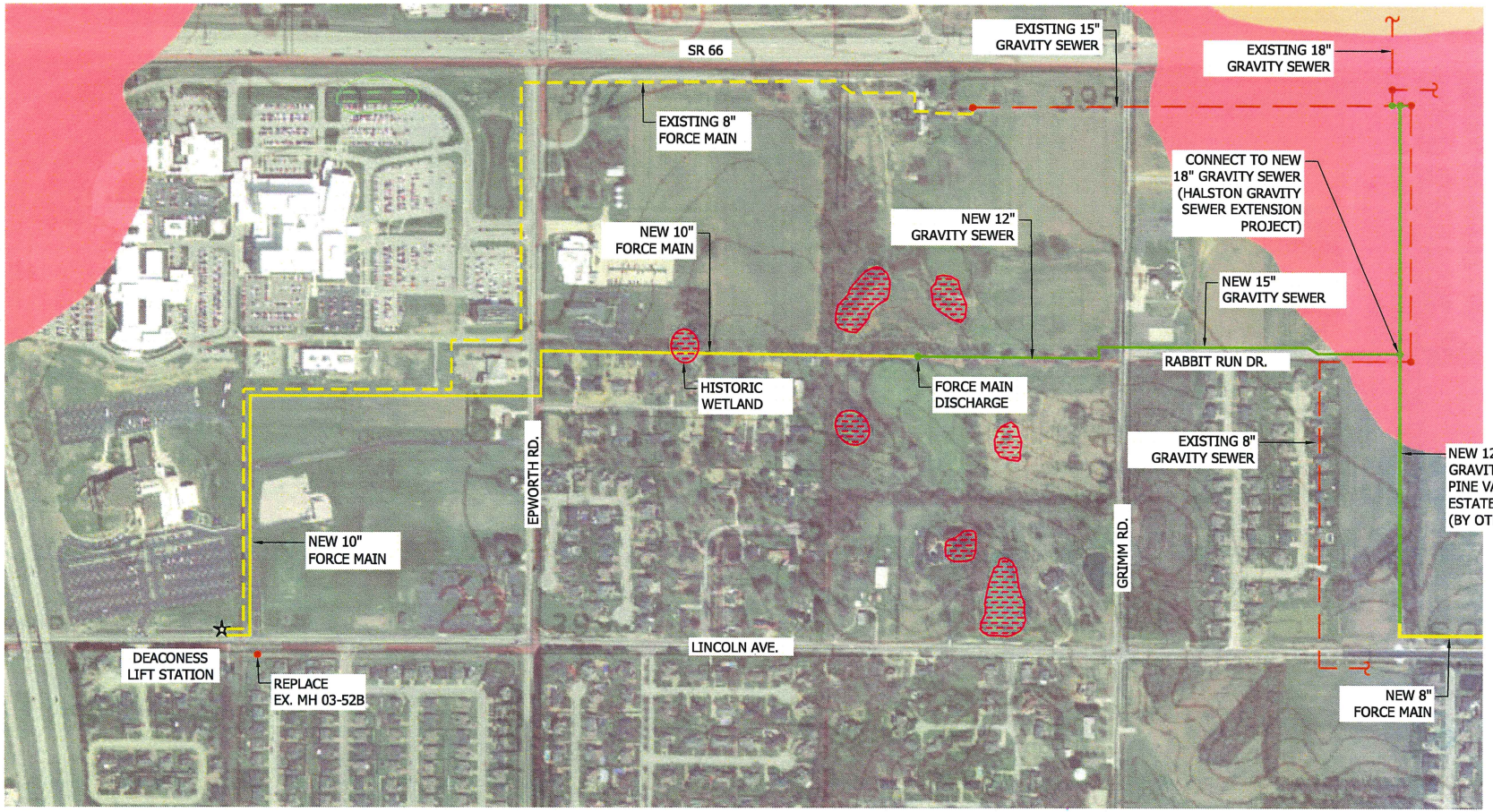
REVISED - SEPT. 24, 2015

COMMONWEALTH ENGINEERS, INC.

TOWN OF NEWBURGH, INDIANA
WARRICK COUNTY

MULTI-PROJECT PER

FIGURE 1
GENERAL LOCATION MAP



SOURCE: INDIANA MAP

LEGEND

- Wetlands
- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- 2013 Orthophotos (State boundary)
- State Boundary

APPROX. SCALE

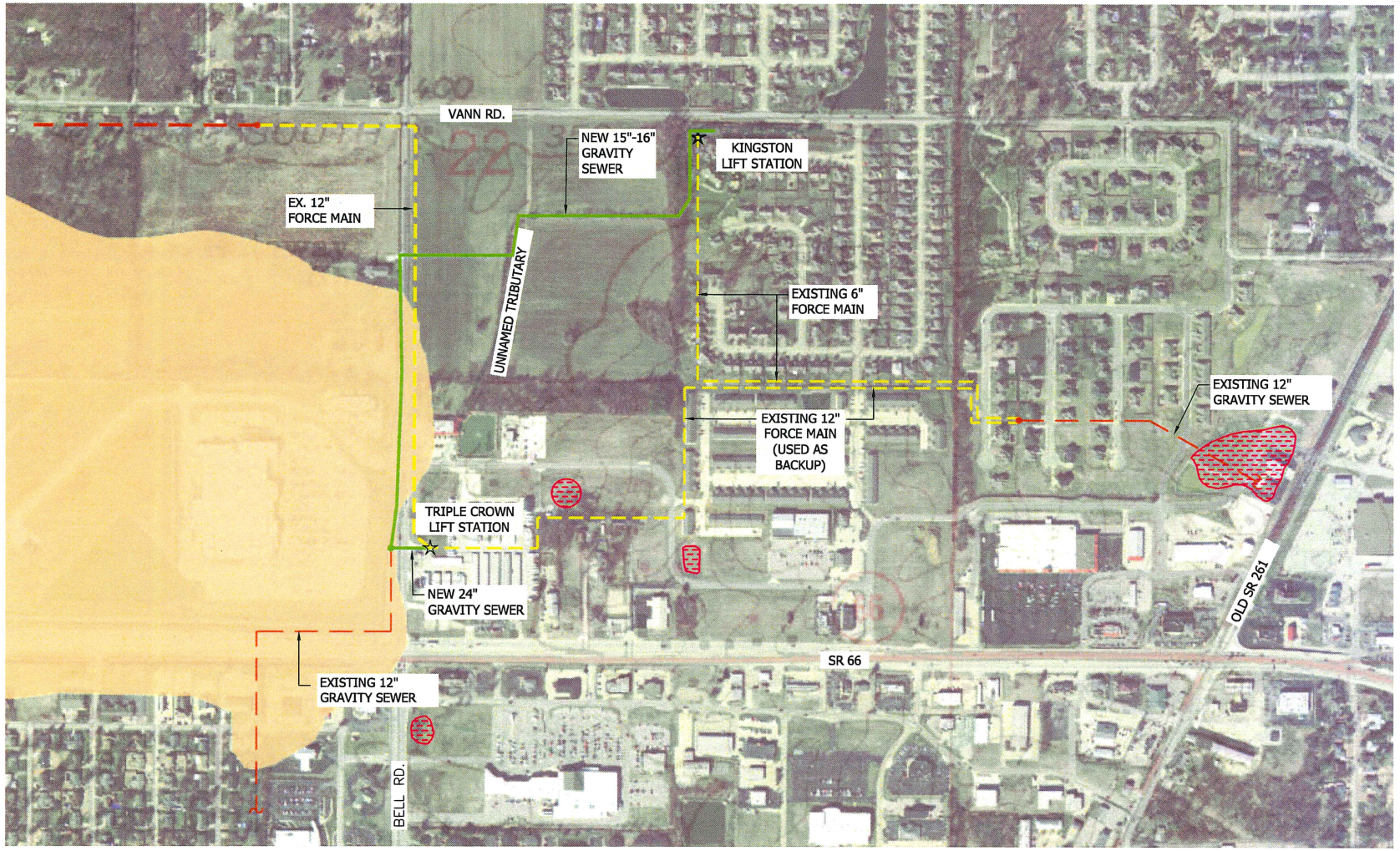
0 800'

COMMONWEALTH ENGINEERS, INC.

TOWN OF NEWBURGH, INDIANA
WARRICK COUNTY

MULTI-PROJECT PER

FIGURE 2 - DEACONESS PROJECT AREA - FLOOD PLAINS AND WETLANDS



SOURCE: INDIANA MAP

LEGEND

- Wetlands
- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- 2013 Orthophotos (State boundary)
- State Boundary

APPROX. SCALE

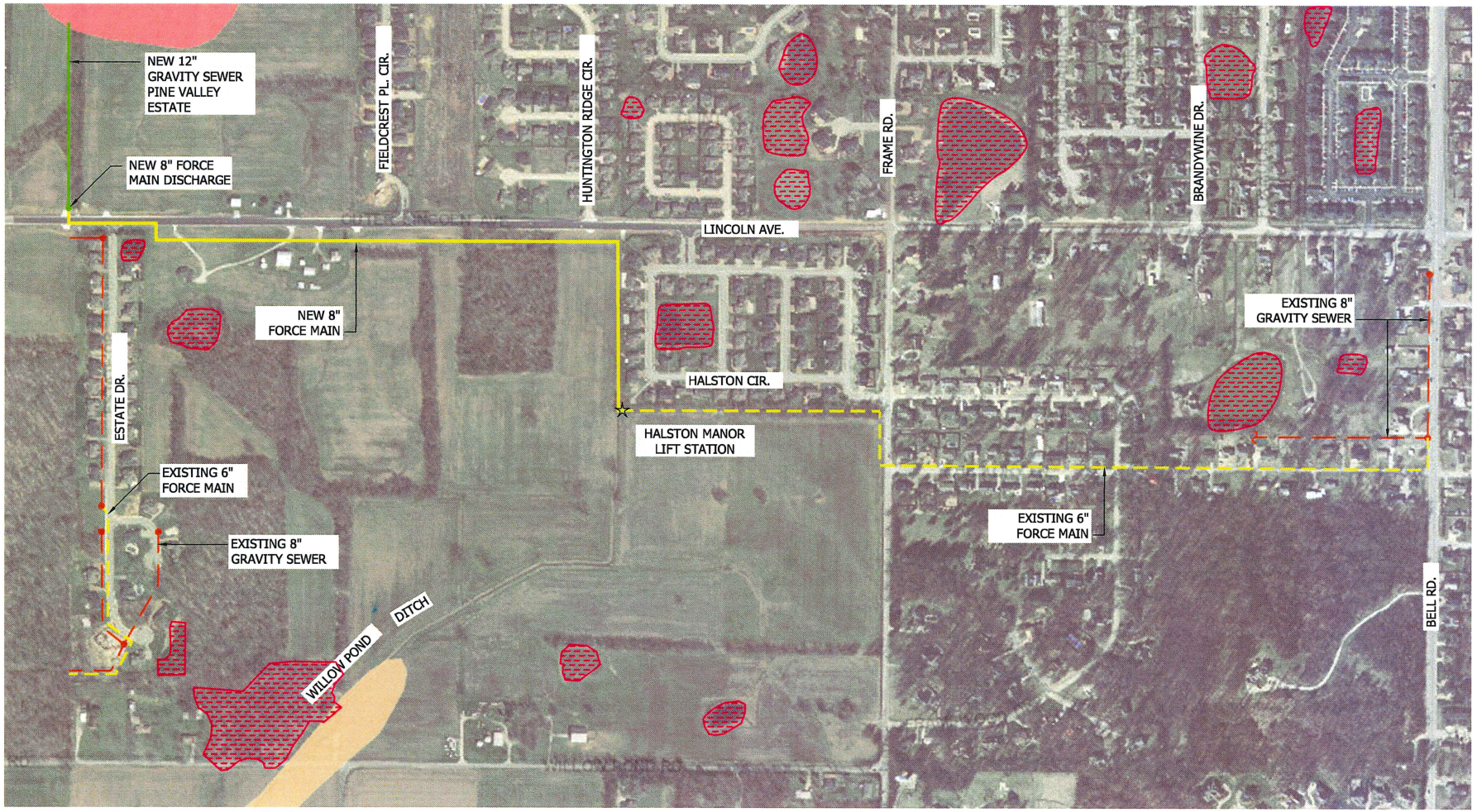
0 800'

COMMONWEALTH ENGINEERS, INC.

TOWN OF NEWBURGH, INDIANA
WARRICK COUNTY

MULTI-PROJECT PER

FIGURE 3 - KINGSTON LIFT STATION ELIMINATION PROJECT AREA - FLOOD PLAINS AND WETLANDS



LEGEND

- Wetlands
- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- 2013 Orthophotos (State boundary)
- State Boundary

APPROX. SCALE

0 800'

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TOWN OF NEWBURGH, INDIANA
WARRICK COUNTY

MULTI-PROJECT PER

FIGURE 4 - HALSTON FORCE MAIN PROJECT AREA FLOOD PLAIN AND WETLANDS

LEGEND

- Wetlands
- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- 2013 Orthophotos (State boundary)
- State Boundary

APPROX. SCALE

0 1,000'

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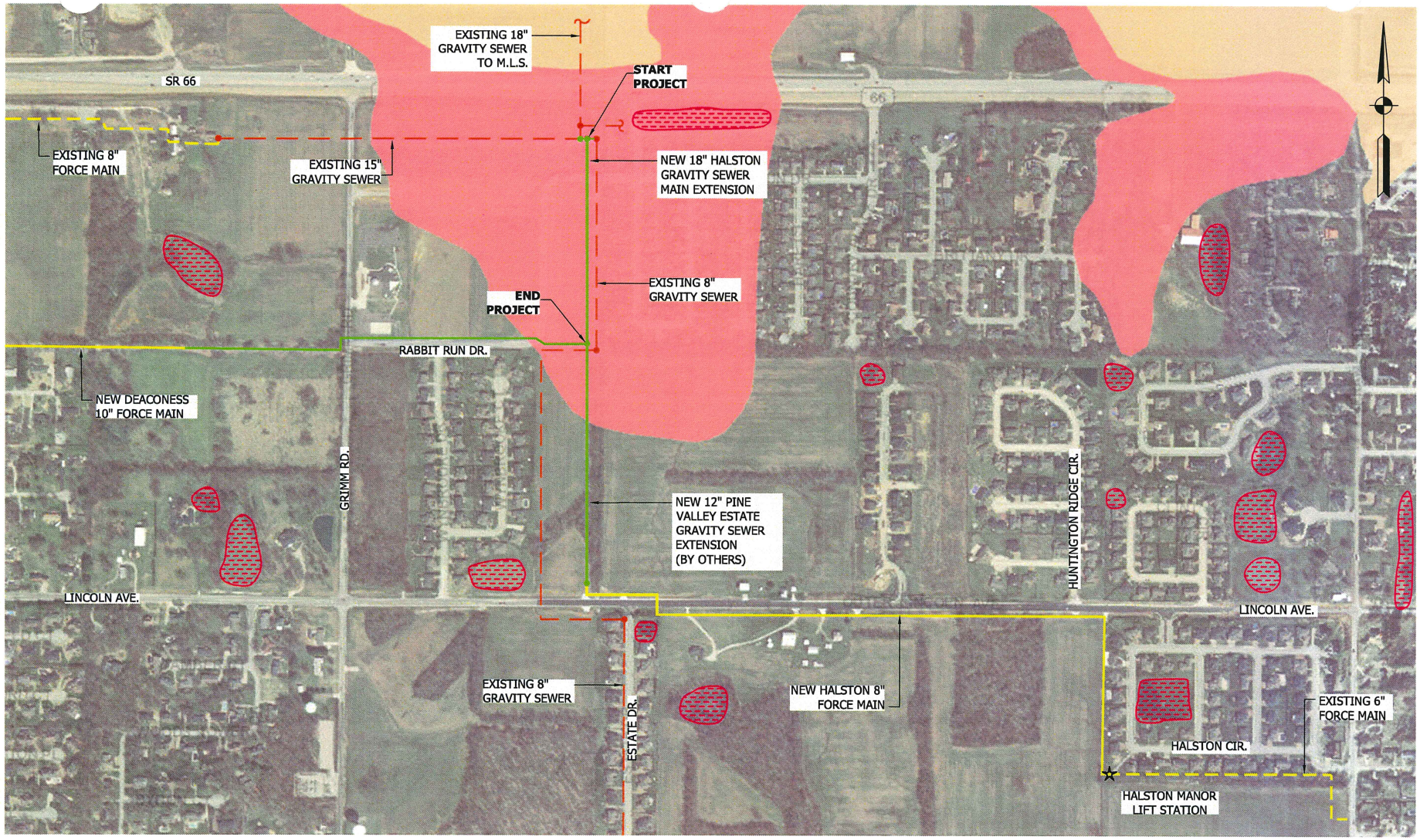
TOWN OF NEWBURGH, INDIANA
WARRICK COUNTY

MULTI-PROJECT PER

FIGURE 5 - LINCOLN AVE. UTILITY RELOCATIONS
PROJECT AREA FLOOD PLAIN AND WETLANDS



LEGEND

- Wetlands
- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- 2013 Orthophotos (State boundary)
- State Boundary

APPROX. SCALE

0 800'

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TOWN OF NEWBURGH, INDIANA
WARRICK COUNTY

MULTI-PROJECT PER

FIGURE 6 · HALSTON GRAVITY SEWER PROJECT AREA FLOOD PLAIN AND WETLANDS